

**PATENT COOPERATION TREATY**  
**PCT**

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**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 12505520/DH/JPN/EJL	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. PCT/AU2004/001296	International filing date ( <i>day/month/year</i> ) 22 September 2004	Priority date ( <i>day/month/year</i> ) 3 October 2003
International Patent Classification (IPC) or national classification and IPC  Int. Cl.  A61C 7/08 (2006.01)		
Applicant  DA CRUZ, Joseph		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☒ (sent to the applicant and to the International Bureau) a total of 12 sheets, as follows:
 

☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).  
☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items:
 

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input type="checkbox"/> Box No. VIII	Certain observations on the international application

Date of submission of the demand 28 April 2005	Date of completion of this report 16 December 2005
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer  <b>XAVIER GISZ</b> Telephone No. (02) 6283 2064

## Box No. I

## Basis of the report

1. With regard to the language, this report is based on:
- ☒ The international application in the language in which it was filed
- ☐ A translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3(a) and 23.1 (b))
- ☐ publication of the international application (under Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1, 5, 6, 8-12, 14-17 as originally filed/furnished
- pages\* 2-4, 4A, 7, 7A, 13, 13A received by this Authority on 2 August 2005 with the letter of 2 August 2005
- pages\* received by this Authority on with the letter of
- ☒ the claims:
- pages as originally filed/furnished
- pages\* as amended (together with any statement) under Article 19
- pages\* 18-21 received by this Authority on 2 August 2005 with the letter of 2 August 2005
- pages\* received by this Authority on with the letter of
- ☒ the drawings:
- pages 1/19 - 19/19 as originally filed/furnished
- pages\* received by this Authority on with the letter of
- pages\* received by this Authority on with the letter of
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to the sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to the sequence listing (*specify*):

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Statement**

Novelty (N)	Claims 1, 2, 5, 9, 12-17, 21-24	YES
	Claims 3, 4, 6-8, 10, 11, 18-20	NO
Inventive step (IS)	Claims 1, 2, 5, 9, 17, 21-24	YES
	Claims 3, 4, 6-8, 10-16, 18-20	NO
Industrial applicability (IA)	Claims 1-24	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

The following documents identified in the International Search Report have been considered for the purposes of this report:

D1.... JP 2002191623

D2.... US 4,299,568

D3.... US 3,967,379

Novelty (N) Claims 3, 4, 6-8, 10, 11, 18-20

Claims 3, 4, 6-8, 10, 11, 18-20: D1 discloses a dental retainer comprising a resin base (101) contoured to contact the inner surfaces of the teeth and an arch wire (104) making contact with the outer surfaces of the teeth. The arch wire extends from the C-clasp (100) around a posterior tooth on one side of the jaw to a symmetrically placed C-clasp on the other side. The arch wire includes U-loops (see figures). The retainer can be made for upper or lower jaw (see figures).

Claims 3, 6, 8: D2 discloses an orthodontic appliance for the upper jaw comprising a base (2) and arch wire (76) with a U-loop (78).

Similarly D3 discloses the features of 3, 6 and 8.

Inventive Step (IS) 3, 4, 6-8, 10-16, 18-20

Claims 3, 4, 6-8, 10, 11, 18-20 also lack an inventive step for the reasons given above.

Claim 12: The use of L-rests is considered common general knowledge in the field of orthodontic retainers and consequently lacks inventive step.

Claim 13: It would be considered common general knowledge to a person skilled in the art to make the base from an acrylic.

Claims 14-16: adding the feature of a bite plane to the base of an orthodontic retainer of D1 would be considered a mere workshop improvement to a PSA and consequently lacks inventive step.